

**Danger to Mumbai High Rise Buildings Due to High Rise Waves**

1685. SHRI SATISH PRADHAN: Will the Minister of URBAN DEVELOPMENT AND POVERTY ALLEVIATION be pleased to state whether it is a fact that a team of Scandinavian researchers have warned for future about a danger to Mumbai's high rise buildings due to high rise waves in the sea and strong earthquake?

THE MINISTER OF STATE IN THE MINISTRY OF URBAN DEVELOPMENT AND POVERTY ALLEVIATION (SHRI BANDARU DATTATRAYA): This Ministry is not aware of the research conducted by a Scandinavian Team on dangers to Mumbai's high rise buildings.

As per information furnished by the Government of Maharashtra, Municipal Corporation of greater Mumbai has not received any such warning. All authorised buildings in Mumbai have plinth level higher than highest high tide level of sea. All new buildings being constructed in Mumbai have been designed as per relevant Bureau of Indian Standard Code for earthquake resistant buildings.

Under a recently concluded world Bank assisted project on "Seismological Instrumentation Upgradation and related Geophysical Studies in Peninsular shield", ten existing seismological observatories of national network of IMD have recently been upgraded to global Seismograph Network (GSN) standards during 1996-97. Another ten existing seismological observatories of national network of IMD were upgraded with Broadband seismographs during early 1999. Ten (10) new observatories have also been/are being installed in Peninsular India.

Also a multi-element seismic telemetry system is being installed in Koynawarna region.

Strong motion instrumentation has been provided in selected high rise buildings i.e. Audit Bhavan, CGO Annexe, and MTNL Telephone exchange in Mumbai to study the structural response during an earthquake. The instruments have been installed at various floors of the buildings.